



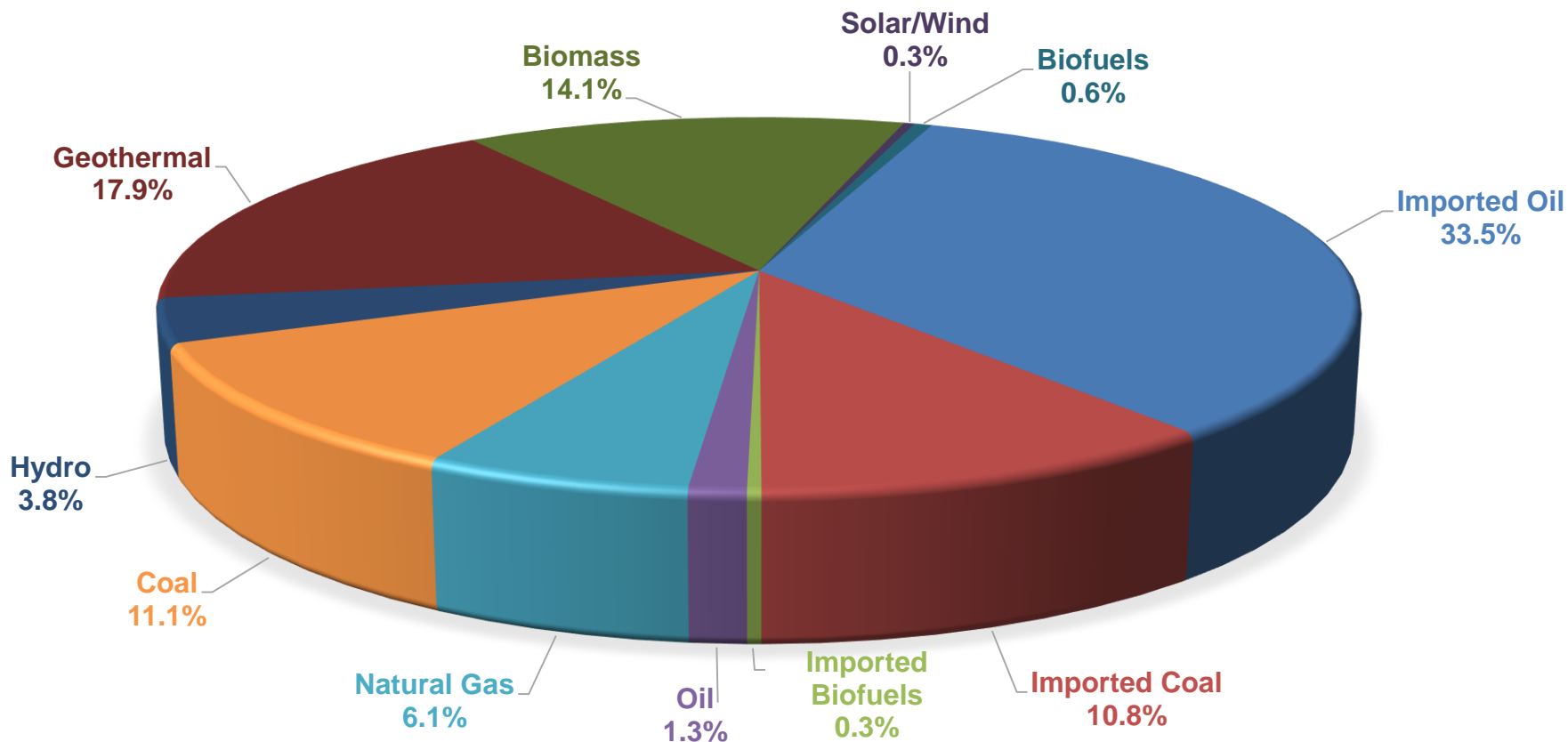
Alternative Fuels Vehicle and Technology

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E-Power Mo!
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PHILIPPINE ENERGY MIX

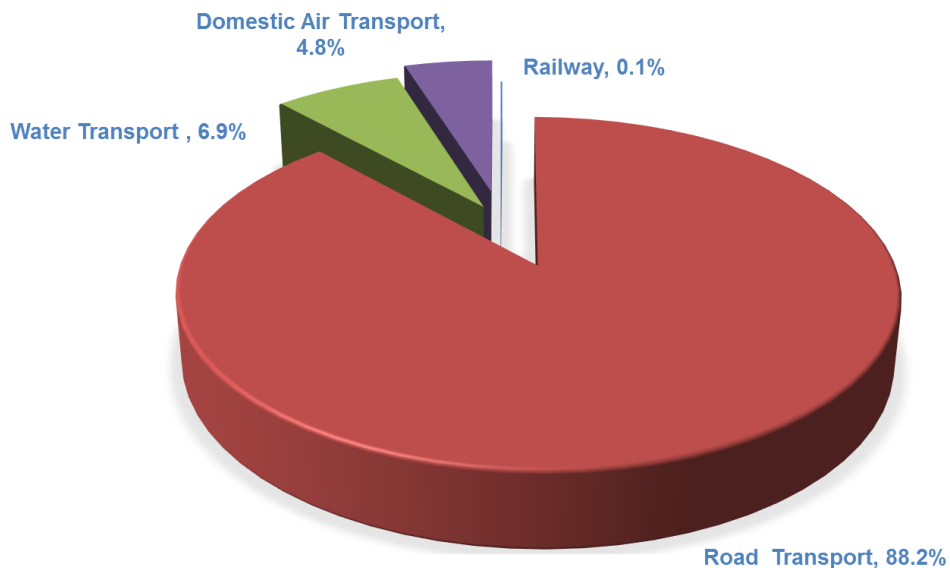


2016 TOTAL ENERGY = 53.19 MTOE

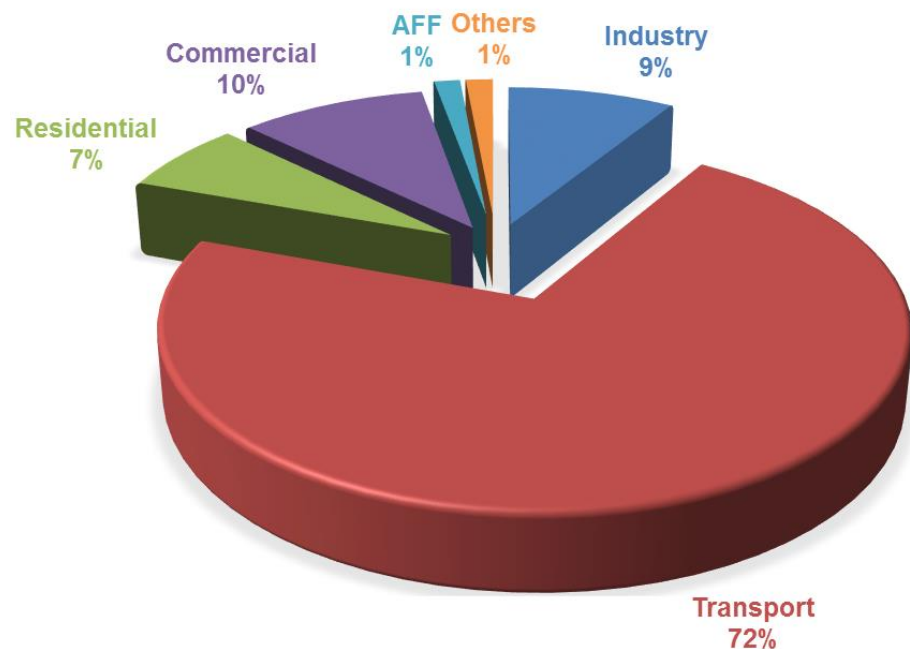
Source: DOE Planning – 2016 data

** Total Mix = Indigenous + Net imported Energy*

TRANSPORT FUEL CONSUMPTION, BY SECTOR



PETROLEUM OIL MIX, BY SECTOR



- **Total Transport Petroleum Consumption = 15,043 kTOE**
- **Total Road Transport Gasoline Consumption = 11,881 kTOE**



VEHICLE TYPE	NUMBER OF VEHICLES
MC/TC Motorcycle/Tricycle	5,329,770
Bus	29,794
Car	971,750
UV	1,969,351
SUV	493,223
Truck	407,357
Trailer	50,315
TOTAL	9,251,560

Source: Land Transportation Office (LTO) - 2016

Achieving energy security and fuel diversification while meeting environmental challenges through the utilization of alternative fuels



Auto-LPG for Taxis & Jeepneys



Electric Vehicles (EVs)

- *AO AHS-2008-014 “Guidelines in the Registration of Low Speed Vehicles (LSV)”*
 - *Covers 4-wheeled electric vehicles*
 - *Exemption from smoke emission testing*
 - *Orange plate and stickers for private vehicles*
 - *Yellow plate and orange stickers for public vehicles (for hire)*

- *AO 2006-01 “Guidelines in the Registration of Light Electric Vehicles (LEV)”*
 - *Covers 2-wheeled and 3-wheeled electric vehicles*

- *Manufacturers, Assemblers, Importers And Dealers (Maid) Accreditation*
 - *Any person, firm, or corporation who desires to transact business with the LTO relative to Motor Vehicles or its components, shall file an application for accreditation, containing certain prescribed information and showing compliance with the requirements set by LTO.*

- *Technical Committee on Electric Road Vehicles (TC 44 of the Department of Trade and Industry)*

Omnibus Investments Code (Executive Order 226)

- *Provides fiscal and non-fiscal incentives to emerging industries listed under the Investment Priorities Plan (IPP)*
 - *The IPP already lists alternative fuel vehicles, including the establishment of charging stations for electric vehicles, as priority areas.*

Market Transformation through Introduction of Energy Efficient Electric Vehicles

➤ *Objectives:*

- To encourage the adoption of electric tricycles as public transport*
- To reduce dependence in conventional petroleum products*
- To achieve emission avoidance by shifting to electric tricycles*

The Project will:

- *Significantly improve the quality of life of the beneficiaries of E-Trike*
- *Promote the use of cleaner and more efficient vehicles*
- *Reduce health cost and economic impact of lost productivity as a result to air pollution*
- *Stimulate the market for E-Trike related support services such as charging stations, repair and maintenance shops, parts and supply services*

Japan Non-Project Grant Aid (NPGA)

Objectives:

- To support the economic and social development of developing countries through the provision of Japanese-made next generation vehicles
- Deployment of next generation vehicles to complement the government's rehabilitation efforts in areas affected by Typhoon Yolanda.
- To promote the use of efficient and environment-friendly AFVs.

85 Units of Next-Generation Vehicles

- 77 units of Hybrid Vehicles
- 4 units of Plug-in Hybrid EVs
- 4 units of Electric Vehicles including charging stations



Beneficiaries include the following:

- PNP police stations in Region 8 that were devastated by the Typhoon Yolanda;
- National Government Agencies (NGAs) in Region 8 that are instrumental to emergency response operations and rehabilitation;
- NGAs involved in the conduct of research, performance testing and promotion of alternative fuel vehicles.



Auto-LPG Program



Program Objectives

- To **diversify the country's fuel resources**, particularly in the transport sector, through the use of LPG as an alternative fuel source while contributing to **addressing the air pollution** caused by vehicular emission.
- To encourage **partnership between public and private sectors** to develop the market and supply infrastructure.

Components of the Program

- Policy formulation
- Monitoring of Infrastructure and Market development
- Standards development
- Information, Education and Communication (IEC) campaign

Monitoring of Infrastructure and Market Development

➤ Dispensing Stations (Nationwide)

(data from DOE-OIMB, as of June 2016)

- About 125 retail dispensing stations
- 67 garage-based dispensing stations

➤ Registered AutoLPG vehicles

- Around 8,415 AutoLPG vehicles (mostly taxis) operating (data from LTFRB, as of June 2016)

➤ AutoLPG Pricing

- Monitoring of AutoLPG prices in the market reflected in the DOE website



Thank You!



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